

## HYDROPHILIC POLYOLEFIN FIBER AND ITS FIBER COMPOSITION

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### Abstract of JP2001040575

**PROBLEM TO BE SOLVED:** To obtain hydrophilic polyolefin fibers which have strong and good oxidation and alkali resistances and are useful for alkali battery separator raw materials, cement-reinforcing fibers, industrial filters, medical treatment articles, sanitary goods, and so on, by subjecting the surfaces of polyolefin fibers to an oxidation treatment using ozone-added hydrogen peroxide water. **SOLUTION:** This hydrophilic polyolefin fibers are obtained by subjecting the surfaces of polyolefin fibers to an oxidation treatment using ozone-added hydrogen peroxide water. Preferably, a part or all parts of at least one of polyolefin resins forming the surfaces of the fibers contain 0.5 to 10 wt.% of a  $\leq 6$ C unsaturated or saturated alkyl carboxylic acid potassium and/or sodium salt having a tertiary or more carbon atom. A polyolefin forming the fibers is preferably polypropylene, and the fibers preferably have a breaking strength of  $\geq 7.1$  cN/dtex.

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